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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,204	11/18/2003	Alan R. Brash	1242/5/2/2 DIV	5756
25297	7590	10/24/2005	EXAMINER	
JENKINS, WILSON & TAYLOR, P. A. 3100 TOWER BLVD SUITE 1400 DURHAM, NC 27707			SWOPE, SHERIDAN	
		ART UNIT	PAPER NUMBER	1656

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/716,204	BRASH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sheridan L. Swope	1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6,8,11-31,38-59 and 61-63 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) \_\_\_\_ is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) 1-6,8,11-31,38-59 and 61-63 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date: ____   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: ____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: ____                                     |

## **DETAILED ACTION**

Claims 1-6, 8, 11-31, 38-59, and 61-63 are pending.

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-6, 8, 11-30, drawn to a polynucleotide encoding a lipoxygenase polypeptide, classified in class 536, subclass 23.2.
- II. Claims 31, 51, 52, drawn to a method for detecting a polynucleotide encoding a lipoxygenase polypeptide, classified in class 435, subclass 6.
- III. Claims 38-40, 42-44, 49, 53-59, drawn to an antibody to a lipoxygenase polypeptide, classified in class 530, subclass 389.1.
- IV. Claims 41 and 45, drawn to a hybridoma producing an antibody to a lipoxygenase polypeptide, classified in class 530, subclass 809.
- V. Claims 46-48, drawn to a method for producing an antibody to a lipoxygenase polypeptide, classified in class 435, subclass 71.1.
- VI. Claim 50, drawn to a method of detecting a lipoxygenase polypeptide using an antibody, classified in class 435, subclass 7.1.
- VII. Claims 61-63, drawn to a method for identifying a compound that regulates arachidonic acid metabolism, classified in class 435, subclass 19.

Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Also, product and process inventions are distinct if any of the following can be shown: (1) that the process as claimed can be used to make another and

materially different product, (2) that the product claimed can be used in a materially different process of using that product, or (3) that the product claimed can be made by another and materially different process (MPEP § 806.05(h)). These inventions are different or distinct for the following reasons.

Invention I is unrelated to Inventions III and IV because the product of Invention I is a physically and functionally distinct chemical entity from the products of Inventions III and IV.

The antibody of Invention III is related to the hybridoma cell of Invention IV by virtue of the cell being useful for making the antibody. Although the cell and antibody are related, they are distinct inventions because they are physically and functionally distinct chemical entities and because the antibody can be made in another and materially different process from the use of the cell, such as chemical synthesis or recombinant production of the antibody.

Inventions II and V-VII are independent because the methods of Inventions II and V-VII comprise different steps, utilize different products and/or produce different results.

The methods of Inventions II and VII are related to the polynucleotide of Invention I as a product and process of using. The inventions are distinct because the polynucleotide can also be used for making the encoded protein.

Invention I is unrelated to Inventions V and VI because the methods of Inventions V and VI can neither use the product of Invention I nor be used to make said product.

Invention III is unrelated to Inventions II and VII because the method of Inventions II and VII can neither use the antibody of Invention III nor be used to make said antibody.

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The method of Invention VI is related to the antibody of Invention III as a product and process of using. The inventions are distinct because the antibody can also be used for purification of the protein.

The method of Invention V is related to the antibody of Invention III as process of making and product made. The inventions are distinct because the antibody can also be made by chemical synthesis or in an animal.

Inventions II and V-VIII are unrelated to Invention IV because the methods of Inventions II and V-VIII can neither use the cell of Invention IV nor be used to make said cell.

A search for more than one of Inventions I-VIII would be a burden on the Office for the following reasons.

Because the products of Inventions I, III, and IV are structurally and/or functionally distinct entities, a search for one said invention would not encompass a search for any other invention and searching all of Inventions I, III, and IV, or a subset thereof would be a burden on the Office.

Because the methods of Inventions II and V-VIII comprise different steps, utilize different products, and/or produce different results, a search for one said invention would not encompass a search for any other invention and searching all of Inventions II and V-VIII, or a subset thereof would be a burden on the Office.

A search for the products of Inventions I, III, and IV would not encompass a search for the methods of Inventions II and V-VIII, or vice versa, because said methods are not the only methods of making and/or using said products. Thus, a search of any of Inventions I, III, and IV with any of Inventions II and V-VIII would be a burden on the Office.

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These inventions are distinct for the reasons given above and have acquired a separate status in the art due to their recognized divergent subject matter, as shown by their different classification. Furthermore, as explained above, searching more than one invention would be a burden on the Office. Therefore, restriction for examination purposes, as indicated, is proper.

Restriction between product and process claims has been required. Where Applicant elects claims directed to a product, and the product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the Official Gazette notice dated March 26, 1996 (1184 O.G. 86; see also M.P.E.P. 821.04, *In re Ochiai*, and *In re Brouwer*). Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right, if the amendment is presented prior to final rejection or allowance, whichever is earlier. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. To be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheridan L. Swope whose telephone number is 571-272-0943. The examiner can normally be reached on M-F; 9:30-7 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheridan Lee Swope, Ph.D.  
Art Unit 1656

  
SHERIDAN SWOPE, Ph.D.  
PATENT EXAMINER